

Table 5 - Sample EMF Data Table

Calculated Magnetic Field Data							
Marinette Area Transmission Reinforcements: Proposed System, Generation Off							
Roosevelt Road to Wells Street 69kV (138kV Double Circuit Horizontal Line Post With 1 Circuit Installed w/ Underbuild)							
2002 Normal 351A		2002 Normal Peak 378A		2011 Normal 399A		2011 Normal Peak 435A	
Distance	Estimate	Distance	Estimate	Distance	Estimate	Distance	Estimate
Centerline	23.4 mG	Centerline	25.2 mG	Centerline	26.6 mG	Centerline	29.1 mG
25 feet	18.2 mG	25 feet	19.8 mG	25 feet	21.0 mG	25 feet	23.0 mG
50 feet	10.4 mG	50 feet	11.2 mG	50 feet	11.9 mG	50 feet	13.0 mG
100 feet	3.7 mG	100 feet	3.9 mG	100 feet	4.2 mG	100 feet	4.5 mG
150 feet	1.7 mG	150 feet	1.9 mG	150 feet	2.0 mG	150 feet	2.2 mG
200 feet	1.0 mG	200 feet	1.1 mG	200 feet	1.1 mG	200 feet	1.2 mG
300 feet	0.4 mG	300 feet	0.5 mG	300 feet	0.5 mG	300 feet	0.6 mG

Marinette Area Transmission Reinforcements: Proposed System, Generation On							
Roosevelt Road to Wells Street 69kV (138kV Double Circuit Horizontal Line Post With 1 Circuit Installed w/ Underbuild)							
2002 Normal 277A		2002 Normal Peak 303A		2011 Normal 287A		2011 Normal Peak 326A	
Distance	Estimate	Distance	Estimate	Distance	Estimate	Distance	Estimate
Centerline	18.6 mG	Centerline	20.2 mG	Centerline	19.2 mG	Centerline	21.8 mG
25 feet	14.1 mG	25 feet	15.5 mG	25 feet	14.6 mG	25 feet	16.8 mG
50 feet	8.1 mG	50 feet	8.9 mG	50 feet	8.4 mG	50 feet	9.6 mG
100 feet	2.9 mG	100 feet	3.1 mG	100 feet	4.8 mG	100 feet	3.4 mG
150 feet	1.4 mG	150 feet	1.5 mG	150 feet	1.4 mG	150 feet	1.6 mG
200 feet	0.8 mG	200 feet	0.9 mG	200 feet	0.8 mG	200 feet	0.9 mG
300 feet	0.4 mG	300 feet	0.4 mG	300 feet	0.4 mG	300 feet	0.4 mG

Assumptions: Bottom conductor height 24.5 feet; centerline to edge of right-of-way 40 feet; unity power factor on distribution system w/ 30 degree lag; distribution and transmission power flows balanced and in same direction; 100A load on the distribution underbuild.